

The Alaska economy is growing as high commodity prices (for oil and gold in particular) drive the private sector and oil revenue surpluses fuel the state budget. But as oil production continues to decline; the prospect for commercialization of North Slope gas in the near term fades; access to petroleum resources on federal lands remains stalled; and non-petroleum resource development moves forward only slowly, many Alaskans are concerned with what path the Alaska economy will take in the next decades.

We could go in four possible directions. Here we offer a short description of each scenario—general enough to let each person fill in the blanks. Our objective is not to predict but rather to stimulate thought and discussion about what Alaskans can and should do to move the economy along the preferred path. Here's a summary of the four potential paths. A more detailed description follows.

WE ARE THE CHOSEN ONES or NO ROOM AT THE FISHING HOLE: Those who think good luck will keep the good times coming can point to a number of times in the past when luck did save the day for Alaska—say, the Prudhoe Bay oil discovery, or the high oil prices that have spared us from most of the effects of the current national recession. So it's possible to be optimistic and believe the state's luck will hold, with rising oil prices driving future developments and keeping the economy healthy and the state treasury full.

THE BIG CRASH or I CAN HANDLE THE HANGOVER BECAUSE THE PARTY WAS AWESOME: Alaskans who know the state's history as a boom-and-bust economy—and especially the economic turmoil Alaska went through when oil prices crashed in the mid-1980s—have reason to believe it could happen again. World oil markets are nothing if not volatile. So it's possible to be pessimistic and think plummeting oil prices could dry up investment in petroleum development and blindsides Alaska's economy again.

THE SLOW SQUEEZE or UP A LAZY RIVER: The economy enjoyed moderate, steady growth in the 1990s. But at the same time flat oil prices and falling oil production were eating away the state's oil revenues. The state balanced the budget during most of the 1990s by using the Constitutional Budget Reserve—and if it hadn't been for that rainy-day account, the need for dramatic budget cuts and tax increases would have put the brakes on the economy. So it's not unreasonable to think that if future oil prices flattened and there was little new exploration and development, both state spending and the economy could dwindle.

STRATEGIC PLANNING or SOCIALIST TAKEOVER: Alaska does have a record of actively managing its publicly owned resources for the maximum benefit of residents (as the state constitution requires). One of the first acts of the new state legislature was banning fish traps and breaking the hold of outside interests on Alaska's salmon fisheries. A more recent example is creation of the Permanent Fund, which Alaskans approved as a way to save part of oil revenues, in anticipation of a time when those revenues would be gone. So looking ahead, there is precedent for the state to actively manage its petroleum resource—through strategic planning—instead of letting world oil markets, the federal government, or other outside interests determine the fate of our economy.

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1. WE ARE THE CHOSEN ONES or NO ROOM AT THE FISHING HOLE

Alaska has always been lucky. Taxes on the oil at Prudhoe Bay—the largest oil field ever discovered in North America—and the other North Slope fields have relieved Alaska households and most businesses of the need to pay taxes (except for local property taxes and, in some communities, sales taxes). Beyond that, oil taxes have paid for a level of public services only dreamed of in other states. And the much-loved Permanent Fund dividend comes from the investment earnings of the \$35 billion Permanent Fund, bankrolled by the royalties oil companies have paid the state. When oil revenues don't seem high enough, OPEC, or China, or someone else intervenes to drive up the price and keep us from the need to tighten our belts. When the economy slows we find a way for the federal government to send us another billion or so in stimulus funding to tide us over. Today we are enjoying good times while most of the rest of the nation is struggling through the great recession.

Just a decade ago the price of oil at the wellhead was only \$20, and the future looked so grim that the state almost enacted an income tax. But then the price went through the roof, where it has remained. In early 2011 it was about \$120 a barrel. In spite of current North Slope oil production at only one-third the historical peak (1989), state petroleum revenues—which lubricate every gear in the economy—are near an all time high at \$6.105 billion (FY2010) and are projected to remain so for at least another decade. It appears we can keep on partying since we also have more than \$10 billion in the bank (not even counting the Permanent Fund, with another \$38 billion).

Looking ahead, this scenario calls for the price of oil to remain high, bolstered by growing demand in China, India, and elsewhere and disappearing low-cost supplies outside OPEC. The federal government recognizes the importance of Alaska petroleum resources to national security. ANWR is opened to development, and the federal lands offshore (OCS) are also explored. The state is able to extract better royalty sharing terms from the federal government from production in these regions, and that goes a long way toward keeping the state treasury full. The petroleum industry—spurred on by an attractive investment climate created by reworking ACES (the state tax on oil production)—figures out how to make production of heavy oil, the stuff that looks like molasses, commercially viable. That doesn't generate much in tax revenues, but it takes thousands of workers to get the stuff out of the ground and down the pipeline. Of course, the North Slope gas pipeline to the Lower 48 also gets built.

In this scenario, petroleum drives the economy on a continuing upward trajectory as these developments unfold over the next two generations. High wages and incomes, business opportunities, low or no taxes, abundant public services, and first class public infrastructure characterize the affluent Alaska economy. More opportunities develop in other industries, like tourism, mining, health, and providing amenities to residents.

The strong economy brings with it population growth that has some negative consequences, like traffic congestion and a squeeze on limited resources like your favorite fishing hole. Not all Alaskans share the view that bigger is better as growth drives change. Urban Alaska becomes more and more dominant, with rural parts of Alaska feeling left behind in the process. But with good leadership, sharing of the prosperity from petroleum could benefit all Alaskans under this scenario.

2. THE BIG CRASH or I CAN HANDLE THE HANGOVER BECAUSE THE PARTY WAS AWESOME

It's possible to see Alaska as a perpetual boom-and-bust place. The economy depends largely on natural resources, and cycles in the markets for furs, fish, timber, gold, and other minerals were all important before Alaska became a state. Even bigger were the economic cycles driven by the military buildups during World War II and the Korean War. Each boom was a time of tremendous opportunity and vitality for some—but not for everyone. Each bust was a time of gut-wrenching loss and retrenchment. And after each cycle Alaska emerged looking different.

The petroleum boom we have been riding for the last 30 years dwarfs all past resource booms in its size and length. It has transformed Alaska economically, socially, and politically. Booms tend to lull people into thinking they will go on forever. But sometimes economic booms stop dead in their tracks with no warning. That certainly happened to the U.S. economy two years ago. And it happened, on a smaller but still scary scale, in Alaska 25 years ago when the bottom suddenly and unexpectedly fell out of the world oil market.

An intense “boom within a boom” began in 1980 when the revolution in Iran led to a dramatic oil price increase just as oil production in Alaska was ramping up. The unexpected bounty of state revenues led to an unprecedented expansion of government spending at the same time activity on the North Slope was booming. The entire economy took off like a rocket, only to crash and burn at the end of 1985 when Saudi Arabia, the biggest OPEC producer, decided to open its oil taps. Overnight the world oil price went into free fall from about \$27 on the west coast to \$9. The crash rippled through the Alaska oil patch but was felt throughout the state, as Juneau put the brakes on the huge capital budgets that depended entirely on the continued flow of oil dollars.

The whole economy took a nose-dive and everyone was hurt, not just people working for government or the oil companies. Overall employment dropped 10%, housing prices fell through the floor, and 10% of the population left—many walking away from the homes that had been their biggest asset. Half the banks in the state failed and closed their doors. The human toll was reflected in highly publicized suicides. The economy limped along for several years until it was saved by another disaster—the 1989 *Exxon Valdez* oil spill—that pumped billions of dollars for cleaning up the oil into the economy. Without that boost, the economy could have languished in the doldrums for a decade. Higher oil prices in the past decade then propelled the economy even higher.

Looking ahead, this second scenario starts out like the first one. Optimism about the future of the petroleum economy leads to overextension of both government and business in the expectation of continued growth. But suddenly, the economy is blindsided by a crash in the world oil market that causes the price to plummet and settle back where it was a decade ago. The gas line to the Lower 48 is not built, ANWR remains closed to development, OCS development proves too costly to be economic, and production on state lands continues to dry up. Since dramatic price swings have occurred many times in the past, and the current oil price is three to four times the historical average, this possibility cannot be ruled out.

When the floor falls out of the oil market petroleum industry in this scenario, investment dries up and the state government—90% dependent on petroleum revenues—effectively goes bankrupt. After running through its cash reserves, the state imposes draconian program cuts and at the same time imposes taxes on households and businesses and increases rates. It becomes clear that the state does not have the tax base to support anything beyond a minimal level of public services. Rural areas are particularly hard hit by state budget cuts, while most of the private and

public job losses from less money flowing through the economy occur in urban areas. When oil production drops below 200 thousand barrels a day, the pipeline shuts down.

This watershed event convinces many of those who have not already left the state that there is no alternative to a permanent “economic downsizing,” although a minority continue to hold out hope that another “Big Project” will come along to reverse our fortunes. (The Alaska dream dies hard.)

With no alternative under this scenario, Alaska starts to borrow from the Permanent Fund and invest the money in “developmental infrastructure”—a course of action driven by panic rather than reason, since it has been shown in the past not to work. There is a terrible battle between those who favor infrastructure projects and the temporary jobs they produce and those who favor continuation of the Permanent Fund dividend. This is just one example of what could happen in the struggle to get a share of the state’s dwindling public resources.

Under this scenario, the Permanent Fund is gone within a decade. Alaska applies to the federal government to return to territorial status.

3. THE SLOW SQUEEZE or UP A LAZY RIVER

It's possible to see what happened in the 1990s as a cautionary tale for the future. The Alaska economy enjoyed a decade of solid growth, a pleasant surprise after the earlier economic crash and oil spill of the 1980s. And although oil production dropped 50% over the decade—from its peak of over 2 million barrels per day in 1989—the economy continued to add jobs each year. Falling production was ignored, and there was a feeling that the economy was maturing and could continue to expand even as its biggest driving industry was shrinking.

Expanding tourism, mining, and air cargo sectors were bringing new money into the economy and attracting a lot of attention, but their overall contribution to economic growth and the state treasury was small. In retrospect, we can see that much of the growth during that decade was due to two temporary phenomena. First, the state was playing catch-up. Past resource booms had been short lived, but the flow of oil from the North Slope and the wealth it generated provided the economic stability that allowed a support economy to finally take root in the state. This was the decade when the big box stores discovered the Alaska market and began to move in, eventually transforming the retail landscape. Personal and business services also accounted for a big part of the growth in jobs, particularly in health care. Second, there was a boom in federal spending, much of it funneled through state government and the Alaska Native corporations.

But even as we were congratulating ourselves during the 1990s that the economy had taken off on a permanent growth trajectory, petroleum employment was trending slowly downward and state oil revenues were falling by half due to flat oil prices and falling production. Throughout most of the decade the state balanced its budget by borrowing from the Constitutional Budget Reserve (\$5.3 billion during the decade, in 2010 dollars), which was nearly empty the late 1990s. Without this temporary revenue source, the need for dramatic budget cuts and tax increases would have put the brakes on the economy. As it was, Alaska job growth was 14% over the decade of the 1990s, but fell short of the 18% growth in rest of the nation. Since then, high oil prices have kept the wolf from the door.

Looking ahead, this scenario portends a future of flat prices—not only for oil and gas, but commodities in general—as new supplies are found throughout the world and technological innovation allows these supplies to compete in the market at modest prices. That eases concerns about the need for a domestic supply of energy and elevates concerns about environmental quality, resulting in less federal interest in developing oil and gas resources in ANWR and in the OCS off the coast of Alaska. At the same time, the state is unable to craft a petroleum tax policy that stimulates investment in new exploration and development of existing—but expensive to produce—petroleum resources. It chooses instead to maximize short-term revenue, in the belief that the level of investment is insensitive tax policy, or that additional investments will not generate much revenue for the state and so the best policy is to “get it while you can.”

This scenario leads to a protracted decline in petroleum employment and petroleum revenues that is slow and easy to ignore but inexorable. Attention turns to “economic diversification,” a development policy that has been pursued since before statehood with limited success. Rather than face up to the writing on the wall that the state economy will need to shrink as it enters its post-petroleum phase, the state spends its time and energy continuing the search for the economic development silver bullet that will bring on the next economic boom. Much of this search involves spending state resources on large-scale projects that proponents guarantee will

lead to economic growth. Although most fail to live up to expectations (like the old Delta barley project), some are successful, and hope springs eternal.

At the same time, public spending is squeezed from the decline in petroleum revenues and the state's aversion to imposing taxes on households and businesses to pay for basic services. Rural Alaska feels the loss of spending first, but it quickly spreads to urban areas as well. Fights over how to share the cuts become increasingly divisive. In this environment job growth stagnates and young workers who cannot find jobs are forced to leave the state. The population ages, incomes fall, and a sense of discouragement emerges.

As the economy shrinks under this scenario, outmigration is driven by a self-selection process. Those most closely tied to the cash economy are more likely to leave, while those who put more value on the Alaska life style are more likely to stay. Those who stay develop a new common bond around a vision of the state as a place to live a good life rather than a place to get rich.

4. STRATEGIC PLANNING or SOCIALIST TAKEOVER

It is possible to see Alaska as a state with a history of stepping up and determining how to manage its natural resources for the maximum benefit of Alaskans. That is what the state constitution requires, and it is reflected in one of the first acts of the new Alaska legislature after statehood. Outlawing fish traps broke the dominance of outside interests in controlling and capturing the benefits of the Alaska salmon fisheries. The state took control of those fisheries and has since managed them very successfully, maximizing the sustainable yield and capturing the annual flow of benefits for Alaska residents. The state also uses the capital budget, loans, and tax policy to try to commercialize natural resources, both publicly and privately owned. Examples include construction of the road in Northwest Alaska to provide access to the zinc deposits on Alaska Native corporation land at the Red Dog mine, and attempts to develop downstream processing of petroleum in the state through various methods.

Managing the state's petroleum resources presents a particular challenge because of their incredible value and because—unlike salmon resources—they are non-sustainable. Through a combination of royalties and taxes, the state has collected \$156 billion (in 2010 dollars) in revenues from oil and gas production since statehood. That represents about 98% of all the natural resource revenues the state has collected since 1959, including those from fishing, mining, timber, and even tourism. These revenues have allowed the state to eliminate most non-petroleum taxes and to expand public services, including capital spending, to a level unheard of in the rest of the country. But this flow of revenues will not last forever, because the conventional oil on state land is running out and future developments will generate less revenue for the state.

Alaskans created the Permanent Fund because they realized the petroleum revenue bonanza would be short-lived. The fund is a way to save some of the revenues collected while petroleum is being produced, in anticipation of the time when that revenue flow dries up. In fact, the Permanent Fund savings account is a way to convert the non-sustainable petroleum resource into a permanent asset that could generate a sustainable flow of revenues—potentially forever.

The portion of oil revenues directly deposited into the fund has been small, leaving most on the table and available for current spending. Concerns about runaway state spending growth have led to additional measures to manage petroleum wealth, most notably the creation of the Constitutional Budget Reserve, but also the Statutory Budget Reserve and the Spending Cap. Through the combined effects of these measures, the state has been able to put 24% of all petroleum revenues into financial savings that could generate more than \$2 billion in earnings each year forever. This income flow could provide some cushion against any economic slowdown coming from a decline in the petroleum industry.

Although we have more than \$45 billion in the bank today (in the Permanent Fund, the Constitutional Budget Reserve, and smaller financial accounts), most of our petroleum wealth is still in the ground. But there is no way of knowing how much additional revenue will be generated when that petroleum is ultimately produced. With high prices and production, petroleum revenues could continue to carry the state for a generation or more. But with low prices and production, the industry could begin to contract and the state budget to tighten. Because of the importance of both to the overall health of the economy, that situation would put the state on very shaky economic ground.

Looking ahead, in this fourth scenario the state continues to actively manage its petroleum resources, rather than letting the world oil markets, the federal government, and other outside

interests determine the fate of the economy. It does this through tax and spending policies that look into the future and balance current desires with long-term revenue needs and employment opportunities. Such policies would remove some of the uncertainty moving forward and let the state better manage the resource for the benefit of all Alaskans, as required by the state constitution. There are three critical elements of a strategic plan for managing the state's petroleum wealth: maximize long-term revenues from production, control growth in state spending, and diversify revenue sources.

Taken together these elements represent a tradeoff that we can think of as an insurance policy. They would trade potentially less revenue from petroleum today, lower current spending, and imposition of some taxes, in exchange for a more certain and stable future with more of the benefits of the petroleum wealth passed on to the next generation of Alaskans.

Some Alaskans would object to this level of planning. Not everyone would agree with this characterization of the uncertainty in the future for the economy. (They have heard the story before, and "Chicken Little" has been wrong every time.) Not everyone is concerned about the next generation of Alaskans, many of whom are currently living in Texas, or California. (A lot of current Alaskans also originally came from the Lower 48.) No one is anxious to pay taxes today, and many would rather take their chances about the need to pay in the future. Many see critical needs that petroleum revenues could be paying for today and don't want to withhold funding for those needs.

Others might question the idea of a future where we simply lived off the earnings of savings accumulated from petroleum production. Economic growth under this scenario might be slower than the rate we've grown accustomed to, but there would continue to be private-sector jobs generated in the oil patch, as well as jobs created by development in Alaska's other natural resource industries.

What's Ahead?

We've outlined four possible future paths for Alaska's economy, based on different assumptions about what lies ahead and what Alaskans may do to try to influence the path of the economy. It's impossible to say just what will happen—but Alaskans need to think about the possibilities and try to develop strategies for keeping the economy healthy in the coming decades.
